

Abstract

The invention relates to a wind turbine with a rotor, a generator driven by it, which generates electrical power and delivers it to a power system, and a control unit which controls the operation of the plant and has a reactive-power control module. According to the invention, it is provided that the control unit has a determining device for a safe minimum active power. Furthermore, it comprises a limiting device for the reactive-power control module, in such a manner that the reactive power is limited to such a measure that the safe minimum active power is still available, taking into consideration the available apparent power. As a result, the total current generated, apart from the active current required for the safe operation of the plant, can be fed into the power system as reactive current as backup in the case of a voltage drop. The invention is also related to a corresponding method.